Six-year-old cocoanut tree with crop of over three hundred nuts. From Samoan seed. Growing in grove of over seven hundred trees near Lihue, Kauai.

NON-SINKABLE LIFEBOAT TO BE GIVEN TEST BY NAVY

NEW YORK.—Up on the Hudson river at 149th street, hidden from view under the dressing rooms of the Manhattan Swimming Baths at that point, there is anchored at present as queer looking a craft as has been seen on the river since the Half Moon's grand-daughter proceeded up stream during the Hulson-Fulton celebration. The odd looking vessel is a non-sinkable lifeboat, the property and invention of Harry Fisher, of New Zealand, who has brought it here to be tried out before representatives of the United States Navy early next month.

It is the assertion of the inventor that the boat cannot be sunk unless it is cut in half, and he says that he has reached this conclusion only after having submitted models of his boat to every possible mishap that might occur in the use of craft of its kind. He has had experimental models crash into heavy ships in heavy seas; has rammed holes in the outer protection of the boat and has placed his models in every difficult position possible, and the result is complete confidence in its ability to withstand any sort of test.

In a recent lauching at Toronto, Canada, the boat was put through all of the contingencies that might accompany a bungling launching, even to the premature parting of the single drop used to get the boat under way, and although the model was allowed to drop thirty feet to the deck of the vessel used in the test, and bound at random into the water, it was practically uninjured, and its floating powers were in no way disturbed.

To glance casually at the boat one might suspect it of anything. It is the last word in floating mystery, suggesting torpedoes, mines or any other type of submarine engine. Constructed entirely of steel, the boat is twenty-four feet long to the points of its cartridge shaped ends. The outer cylinder, which is six and one-half feet in diameter, surrounds another cylinder in which the passengers are quartered, and there is a clearance of five inches between the two cylinders.

The inner cylinder is so weighted and adjusted that it remains perpendicular at all times, despite the buffeting about of the outer shell. The outer protection may revolve completely without interefering with the position of the passenger car.

The passengers enter the boat through two horizontally sliding doors on the top, inside the car proper seats of wire netting extend lengthwise along the sides. These seats accommodate forty passengers, and as many more can be carried without inconvenience—in the space of the central portion of the car. In the conical ends of the boat, which are fitted up as observation compartments and signal quarters, there is room for two seamen. On the opposite side of the entrance there are two more emergency doors, which may be used in the event of the boat beaching right side up.

Food and water may be stored in quantities in lockers, which are constructed under the seating space, and an air supply is provided at all times by valves which surround the boat and are so arranged that they open and shut automatically, being closed under water and open above the water line, as the boat changes position. Light is provided for with heavy batteries and also an arrangement of thick glass windows, which are out of point on contact and admit the daylight.

In the almost impossible event of the boat being sunk temporarily by some tremendous weight, provision has been made for shutting off of all air outlet, thus making the boat an airtight compartment. It is the assertion of its owner that forty passengers could remain alive three minutes with the air supply in the boat itself.

An arrangement on the principle of the railroad handcar turns the propeller, the passengers furnishing the power with a rail lever, and the craft makes the average speed of an ordinary rowboat.

One of the principal advantages explained by the inventor is the speed with which the boat may be launched. At a recent tryout at Toronto bay, Canada, the boat, loaded to capacity with passengers, was launched in the record time of thirty seconds. The passengers were hurried into the boat in two minutes before it was thrown to the water. The speed in launching is made possible by an additional invention, which consists of a metal cradle in which the boat sits and to which it is secured by a small lever. The boat is pivoted off balance and by the release of the lever is allowed to drop into the water att he vessel's side.

During the launching the passengers remain at all times in a perpendicular position and are in no way inconvenienced by the roll as the boat leaves its position on the cradle.

The cradle method of launching the boat was evolved after an accident at a launching in Canada. At the time the boat was launched by being raised thirty feet in the air over the deck of a vessel, it was attached by flanges to a steel girder and was supposed to run to the end of the girder and drop into the water.

The boat had been filled with men, women and children. All went well until the boat had rolled along about half the length of the girder, when the attachments broke and the lifeboat dropped to the edge of the vessel and bounded into the water. It came up more than forty feet away, and one of the crew immediately showed a flag through one of the apertures to reassure those on board the vessel that the lifeboat passengers were safe. A huge hole was stove in the side of the outer compartment at the time, but the craft settled down to the level of the inner craft and continued to float easily.

Aside from its ability to float, the boat has equipment to attract attention to it in time of stress. There is a heavy battery which supplies ligh: at both ends of the boat and makes it risible at night for many miles. No ship with a curious passenger aboard would ever attempt to pass the craft in midocean, for to the lay observer it might be anything under the sun at first glance.

THE MISSISSIPPI RIVER

The river lying wholly within the temperate zone is in this respect more fortunately situated than the more fertile valleyed Amazon, since the climate here, varied and sometimes inhospitable as it is, offers conditions of human development there denied.

The main stream is 2500 miles in length; that is about ten times that of the Seine. As Mark Twain has said, it is "the crookedest river" in the world, traveling 1300 miles to cover the same ground that a crow would fly over in 675. For several hundred miles it is a mile in width. Back in 1882 it was seventy miles wide when the flood was highest.

The volume of water discharged by it into the sea is second only to the Amazon and is greater than that of all European rivers combined (omitting the Volga.) The amount is estimated at 139 cubic miles annually; that is, it would fill annually a tank 139 miles long, 139 miles wide, and 139 miles high. With its tributaries it provides somewhat more than 16,000 miles of navigable water, more than any other system on the globe except the Amazon—and more than enough to reach from Lake Superior to Paris by way of Kamchatka and Alaska, about three-fourths of the way around the globe. The sediment deposited is 400,000,000 tons, enough to require daily for its removal 500 trains of fifty cars, each carrying fifty tons, and to make each year two square miles of new earth over a hundred feet deep.

The area which it drains is roughly a million and a quarter square miles or two-fifths of the United States. That is, Germany, Austria-Hungary, France and Italy could be set down within this area and there would still be some room to spare.

It has the strength, for the most part put to no use whatever, of 60,000,000 horses. The difference between high water and low water is in some places fifty feet, which gives some impression of the range of its moodiness.—John Finley in Scribner's Magazine.

LINKING UP IN THE SOUTH SEAS

Over 1500 miles of cable for the new line from Bondi to Auckland has arrived from London by the cable steamer Silvertown, says the Sydney Telegraph of November 15. The Silvertown came out via the Cape of Good Hope route, and she is accompanied by Mr. F. C. Crawford, who is to superintend the laying of the cable. The vessel is calling here to coal, and will afterwards proceed south of the Heads, to start paying out the cable from Bondi.

The contract for putting down the cable is being carried out by the India Rubber, Gutta Percha & Telegraph Works Company, Limited, the cost approximately £250,000. The work is to be completed by the end of the year. Nothing which touches daily life at so many points is associated with more interest, and even romance, than the deep-sea electric cable, which, lying on the ocean bed, links continent with continent, and provides the means of almost instantaneous communication between cities and people separated by thousands of miles of broad sea. The manufacture of these submarine cables constitutes one of the many departments of the works of the India Rubber, Gutta Percha & Telegraph Works Company, Limited, at Silvertown, London. Here one may see every process of the construction of the cable from the first stranding of the thin copper wires of the core to the sailing from the company's wharf on the Thames of the steamer Silverton, carrying the hundreds of miles of cable, coiled in huge tanks, and with special equipment to lay it.

The Silverton is specially adapted for this work. She is a steamer of 3723 tons net, and 4935 tons gross, with a length of 350 ft., beam of 55 ft., and depth of 34 ft. 6 in. Her engines give a speed of 11 knots per hour. She is fitted with three cable tanks. The total cubic capacity of tanks and cones is 171,415 cubic feet. The contents of entire ship is 500,000 cubic feet. On one of the Central and South American expeditions, of which there have been four, to the Pacific side, laying cables from Salina Cruz, Mexico, on the north, to Valparaiso, on the south, 2370 nautical miles of cable, weighing 4881 tons, were coiled on board in 22 days; the greatest length coiled in 12 hours, in one tank, being 65 nautical miles, or nearly six nautical miles per hour.

BATHING IN FRANCE

Saint Lo, a little village in the Manche department, has no public bathhouse such as those found in most French towns and cities, for the private bath in France is yet, as it were in its infancy. The youngsters of the town bathe in the Vire, but the 12,000 other inhabitants think themselves above such a thing as a bath. Visitors can get a bath, it is true, but they must order four liters of water, all that they are permitted, and it is taken to them.

Not long ago a visitor in the town wished to take a bath. He went to the hospital to ask permission to take a bath there, as in Brittany, this is the custom in towns where there is no public accommodation. The visitor's request was received rather coldly, and he was told that he would have to make his request in writing to the directors of the hospital. This he did and patiently awaited a response. None came, and the visitor left town.

Two days later the response came and followed him from town to town throughout France, not catching up with him until he had returned to Paris.

The response was as follows:

"M ——— is exceptionally authorized to take a bath at the hospital on condition that he is able to justify by a medical ordinance that this medicament is necessary to his state of health."

Servia is determined to keep an outlet on the Adriatic in spite of Austria and will not apologize to Austria for the Prizrend affair. It is reported that, consequently, the entire Austrian fleet has concentrated at Pola. Austria-Hungary's chief naval station.